IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please ADD claims 40-45 and CANCEL claims 3-25, 27, and 37-39 in accordance with the following:

1-39.   (CANCELLED)

40. (NEW) A method of channel searching for a digital television receiver, comprising:

receiving a digital television transport stream which includes audio, video, and program information;

extracting the program information from the received transport stream;

storing the extracted program information in a storage;

accessing the storage to generate a channel list based on the stored program information, wherein the channel list comprises at least one main channel number and the at least one main channel number has one corresponding sub-channel number in the received transport stream; and

navigating the channel list to search the sub-channel number,

wherein if the at least the one main channel number has at least one corresponding sub-channel number in the received transport stream, the sub-channel number can be listed after the at least one main channel number wherein the channel list can be accessed according to a listing sequence comprising main channel numbers and respective sub-channel numbers.

41. (NEW) The method of claim 40, wherein the channel list can be navigated using Program Specific Information (PSI).

42. (NEW) The method of claim 40, wherein the listing sequence can be determined based on proximity between main channel numbers to allow the main channel number to be listed with at least one upper close channel number or at least one lower close channel number.

43. (NEW) A method of channel searching for a digital television receiver, comprising:

converting an IF signal from a tuner of the receiver into a baseband signal;

channel decoding the baseband signal to reconstruct a transport stream which includes audio, video, and program information

extracting the program information from the received transport stream;

storing the extracted program information in a storage; and

accessing the storage to generate a channel list based on the stored program information,

wherein the channel list comprises at least one channel number and the at least one channel number comprises at least one main channel number in the received transport stream;

navigating the channel list to search a channel number;

wherein if the at least the one main channel number has at least one corresponding sub-channel number in the received transport stream, the sub-channel number can be listed after the at least one main channel number wherein the channel list can be accessed according to a listing sequence comprising main channel numbers and respective sub-channel numbers.

44. (NEW) A method of channel searching for a digital television receiver, comprising:

receiving a digital television transport stream which includes audio, video, and program information;

extracting the program information from the received transport stream;

storing the extracted program information in a storage;

accessing the storage to generate a channel list based on the stored program information, wherein the channel list comprises at least one channel number and the at least one channel number comprises at least one main channel number in the received transport stream; and

navigating the channel list to search a channel number,

wherein if the at least the one main channel number has at least one corresponding sub-channel number in the received transport stream, the sub-channel number can be listed after the at least one main channel number,

wherein the channel list can be navigated using Program Specific Information (PSI).

45. (NEW) The method of claim 44, wherein the channel list can be displayed and the sub-channel number can be displayed after the main channel number.

3